

## BOOK NOTICES

## ENTOMOFAUNAL PUBLICATIONS FROM THE AUSTRALIAN REGION

In recent years, Australian and New Zealand government and museum entomologists have undertaken preparation of major series of faunistic treatments which are of substantial value not only locally but also more distantly, for those extra-territorial biologists who want to gain some level of familiarity with the notogaean arthropod fauna. Previously, *Quaestiones Entomologicae* has published extensive reviews or notices of two series: Fauna of New Zealand, and A Guide to the Genera of Beetles of South Australia. Series previously unnoticed in the pages of *Quaest. Ent.* are the Zoological Catalogue of Australia, and the Fauna of Australia. We have not yet seen any parts of the last named series. Below, comments are offered about recently received parts of the first three series noted.

HARRIS, A. C. 1987. Pompilidae (Insecta: Hymenoptera). Fauna of New Zealand [no.] 12, 154 pp. DSIR Science Information Publishing Centre, P.O. Box 9741, Wellington, New Zealand. Price \$39.95 (New Zealand), \$34.25 (Canadian).

The 11 species of spider wasps (10 endemic, one introduced from Australia) representing four genera included in two subfamilies, are treated in fulsome manner, including for each species data about: names; structural features of adults and larvae; and way of life, including hunting of spiders by adult females, "nidification formula", nest site and structure, life history, and emergence and copulation. Variation in color and color pattern are clearly indicated by stylized diagrams, and various structural features and nests are illustrated by line drawings and photographs. The frontispiece is a superb photograph of a paralyzed ctenizid spider with a larval pompilid attached.

To aid in identification of taxa, illustrated keys are provided to adults (males and females), larvae, and type of nesting behavior.

An introductory part of the publication treats an appropriately wide variety of biological information about New Zealand pompilids: structural features of adults and larvae, geographical variation, mimicry, nesting behavior, biogeographic relationships, and evolutionary relationships. I found especially interesting the author's observation about mimicry. Three complexes are recognized, based on color pattern of body and wings, and pattern of movement of adults. Each complex has Müllerian and Bastesian components, including collectively, elaterid beetles, asilid and calliphorid flies, ichneumonid, proctotrupid, and sphecid wasps, and bees.

The substantial amount of attention devoted to prey capture and nesting behavior is supplemented by an appendix that records, in association with the name of the predatory wasp species, family, genus and species of the spider prey. Information of this kind will be of interest to general biologists and behaviorists.

Overall, the author has provided a study that easily meets the very high standards associated with publications about aculeate Hymenoptera, in the tradition of such masters as Howard E. Evans, Karl V. Krombein, and Charles D. Michner.

MATTHEWS, E. G. 1987. A guide to the beetles of South Australia. Part 5 Polyphaga: Tenebrionoidea, 67 pp. Special Educational Bulletin Series (No. 8), South Australian Museum, Adelaide, Australia.

This volume, the primary purpose of which is to provide a simplified means of identifying adult beetles to genus, consists principally of illustrated keys and 135 habitus illustrations—some excellent line drawings, and some photographs—one such illustration for each genus. In a chapter preceding the keys, each of the 17 families of tenebrionoids of South Australia is briefly characterized by comparison or by reference to diagnostic structural features, and by reference to way of life. Under each family, genera are listed, and number of species of each genus in South Australia is reported. For the markedly speciose Tenebrionidae (including Alleculidae, Cossyphodidae, Lagriidae, and Nilionidae), the genera are grouped by tribe and subfamily.

The volume is attractively bound with a soft cover, on which is a color illustration of a brownish “pie-dish” tenebrionid of the genus *Helea* on brownish pebbly soil. This useful publication continues the high standard set in the previous volumes in this series.

LAWRENCE, J. F., B. P. MOORE, J. E. PYKE, and T. P. WEIR. 1987. Volume 4 Coleoptera Archostemata, Myxophaga and Adepghaga. viii + 444 pp. *In*, Zoological catalogue of Australia (D. W. Walker, Executive Editor). Australian Government Publications Services, Mail Order Sales, G. P. O. Box 84, Canberra A. C. T. 2601. Price \$34.95 (Australian), \$33.54 (Canadian).

This volume catalogues the taxa of three suborders: Archostemata, including families Cupedidae and Ommatidae, and Myxophaga, family Microsoridae (Lawrence, Weir, and Pyke); Adepghaga- Geodephaga, including families Rhysodidae and Carabidae (Moore, Weir, and Pyke); and Adepghaga- Hydradepghaga, including families Haliplidae, Hygrobiidae, Noteridae, Dytiscidae, and Gyrinidae (Lawrence, Weir, and Pyke).

For taxa of supraspecific rank, arrangement is taxonomic according to the latest revision. For species, arrangement within genera is alphabetical by specific epithet, and within species, subspecies are arranged alphabetically by subspecific epithet.

Information presented for taxa is abundant. For each family, a brief account is given about number of included species, composition, world distribution, fossil record, habits and life cycles, as well as taxonomic history and present state of knowledge of the group within Australia. Generic and specific synonymies are detailed for the Australian components. Data about geographical distribution were compiled from published sources and from personal knowledge of the authors, as appropriate. Habitat and life history data are also included.

Names of taxa in the text are set in boldface, and they stand out clearly. The text is complemented by an extensive index of taxonomic names. The durable volume has hard covers, with a covering of blue cloth.

This contribution is excellent, and is a credit to the authors, editors, and printers, and to the Division of Entomology, CSIRO, under whose aegis the required bibliographical research was carried out. Coleopterists will be looking forward to publication of the remaining parts of this remarkable catalogue that deal with beetles.

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